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In this paper the author hopes to "persuade methodologists and foreign language teachers to attack the problem of foreign language acquisition" from what he considers to be a "more strategic angle." He is concerned with how language proficiency, rather than the individual skills, can be taught. The author doubts whether it is possible to develop foreign language proficiency in an artificial, uncultural situation by any known method but suggests that in order to find out any experimental program be tried out first on foreign language majors rather than beginning language students. If it succeeds with them, then the method can be applied "downward" to non-majors, first to advanced students, then to intermediate students, and finally to elementary students. How far "down" one can go will depend on the extent to which a foreign language program is geared exclusively to the acquisition of language. The acquisition of foreign language skills should take precedence over any linguistically, esthetically, or educationally oriented considerations. (DO)

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Where Is Programmed Language Instruction Most Effective?

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Since the title of this paper is stated in the form of a question, this would seem to imply that an "answer" or a "solution" is to be found in the remarks that follow. I can assure the reader that this will not be the case. All I can hope to do is persuade methodologists and foreign language teachers to attack the problem of foreign language acquisition from what I consider to be a more strategic angle.

Before beginning this task of persuasion, I should like to pose three more questions for which I have no ready-made answers:

1. Can a foreign language be acquired in a unicultural, artificial situation involving the classroom and the language laboratory?
2. Assuming the answer to the preceding question to be "yes," what kind of materials are vital to making a foreign language program a success: contrived materials, controlled materials?
3. If such materials can be designed and developed, at what level should they be introduced: elementary, intermediate, or advanced level? Undergraduate FL major, graduate FL major, or FL teacher level?

Let us examine some of the circumstances which provoke these questions.

It has been commonly supposed that given optimum conditions where a superior teacher could present an ideal foreign language program, with no limitation imposed by "time," to a class of

highly motivated, gifted language students, then developing proficiency in a foreign language would be most likely a routine matter. I should like to state that I seriously doubt that anything approaching real proficiency could be attained under the most ideal pedagogical conditions with any foreign language materials developed thus far. I don't believe anyone would seriously expect that -- let us say -- a child born in France of French speaking parents could be removed from that country, and by placing him in one of our better French programs might approximate the degree of proficiency attained by the French pre-school children he left behind.

Then it is sheer naïveté on our part to expect that the ordinary foreign language classroom made up of a teacher, who may or may not have native fluency, plus some twenty-five students beyond pre-school age -- exposed to artificial stimulus-response activity in the laboratory as well as "hit or miss" language activity in the classroom -- could provide the conditions necessary for foreign language acquisition. Note that a child who learns his native language learns it under conditions that are far from ideal. He hears distorted speech, baby talk, hemming and hawing, false starts and stops, non-linguistic noise, etc. Yet despite all these adverse conditions, he does learn the language. Such conditions do not even prevent a moron from learning his native language.

In 1963, I was most optimistic about programmed learning.¹

As chairman of the 1963 NE Conference Working Committee on Listening and Speaking, I suggested that a carefully integrated series of step-incremented drills consisting of some 50,000 selected structural features might be conceivably equivalent to the amount of structure internalized by the average native speaker of the language. Since at that time most language programs offered fewer than 80 class periods per semester, I maintained that programmed learning utilizing linear and branching techniques would be more effective in a team-teaching situation that shifted the emphasis from covering a relatively indefinite amount of language within a definite period of time to assimilating a definite amount of language within a relatively indefinite period of time. Most of the mim-mem teaching could be taken over by mechanical and electronic devices, leaving the teacher free to plan a more effectively controlled informal discussion program. The method not only involved self-evaluation techniques but contained built-in "self pacing" procedures taught "live" and/or in the laboratory.

Roughly speaking, the method proposed a sixteen week semester divided into eight two-week learning units. Ideally, each teacher of a team of four instructors would be in charge of two two-week learning units. Each student was to be progressively shifted from one two-week unit to the next higher unit only if he made an achievement score of ninety percent or better. No one could fail since credit would be given for ninety-percent achievement or better only after the course was completed. Not all of the students would

necessarily finish the first semester's work at the end of the sixteen weeks. If 120 students began the course at the same time, they might be spread over the entire program at the end as follows:

End of 16 Week Semester

		Instructors					
		A	B	C	D		
9:00 a.m.	number of students	2	3	5	8	→	
		First 4 two-week period					
		Instructors					
		D	C	B	A		
	number of students	10	22	30	40	10:00 a.m.	
		Second 4 two-week period					

In the ordinary classroom situation, students may be exposed to a barrage of language involving all of the 50,000 structural features -- or perhaps more. Yet each student assimilates chunks of this structure in varying degrees at the end of each academic year. The team-teaching method exercises far more control over what the student assimilates. But what does the student actually assimilate in terms of "real language?" Even if he assimilates one hundred percent of the 50,000 structural features, what does this mean in terms of "real" syntactic, semantic, and phonological features internalized by the average three and a half year old native French child?

My own research with contrastive analysis and sentence

embedding procedures has taught me that each language has so many idiosyncratic and language particular rules that no foreign language course in existence could possibly incorporate all the necessary constraints into a pedagogical system based solely on drills, dialogues, and similarly "contrived" materials. I do not mean to imply that contrived materials have no value. On the contrary, they are excellent pedagogical tools for building a foundation in the foreign language -- for what I have called attaining the stage of "nucleation."² But the best "contrived" materials will never take the student beyond the nucleation stage so that he can develop the "language competence" necessary for the eventual development of "language proficiency."

I have examined elsewhere the rationale that lies behind the use of structurally seeded dialogues and pattern drills as a medium for building a foundation in the foreign language.³ I have also pointed out why such a medium may be a necessary -- but far from a sufficient -- condition for developing foreign language proficiency.⁴ The multitude of co-occurrence restrictions on nouns, verbs, adjectives, prepositions, different construction types, etc. are so numerous in any language, that no step-incremented techniques developed up to the present time will guarantee correct analogizing or prevent students from making non-grammatical sentences. It is amazing that students succeed in learning as much foreign language as they do. And the less-than-five-percent who do develop FL proficiency do so, not because of the system -- but

in spite of it.

It will do no harm to add one or two examples to the many others I have cited, showing what kind of constraints pedagogical grammars fail to take into account. For example, a drill sequence might "train" a student to say or write: Je dis qu'il vienne tout de suite and Je lui dis de venir tout de suite. A different sequence might enable him to produce: Je dis qu'il est venu tout de suite but will not necessary "prevent" him from saying or writing the non-grammatical sentence: *Je lui dis d'être venu tout de suite. Again the student might learn that Je dis qu'il est pessimiste, Je crains qu'il (ne) soit pessimiste, Je me rappelle qu'il est pessimiste may be rendered in a replacement drill respectively as Je le dis, Je le crains, Je me le rappelle. Subsequently, wrong analogizing may lead him to replace Je doute qu'il soit pessimiste and Je m'aperçois qu'il est pessimiste by such non-grammatical sequences as *Je le doute and *Je me l'aperçois instead of J'en doute and Je m'en aperçois.

Short of bringing the principles involved to the student's attention by "intellectualization" and transformation "prevention" drills, there is little a teacher can do to prevent wrong analogizing. In other words, the student might be told that when the verb dire is used with the meaning "to order" (not with the meaning "to declare"), then the dependent noun clause may be replaced by the infinitive construction. Or he may be told that douter and s'apercevoir require the preposition de before any following noun

or pronoun. Although he may be tested to determine whether he has "intellectualized" the grammatical principles involved by drills that require him to respond to a "sentence cue" such as Je dis qu'il a travaillé with the same sentence: Je dis qu'il a travaillé (Instead of Je lui ai dit de travailler), there is little guarantee that he will remember the principle or give the correct response to the same or similar cues a day or so later.

We simply do not know enough about language structure or cognitive processes to know what should go into materials or how the student should go about learning them. Very few material-writer-specialists are willing to admit this to themselves.

If by some miracle we could incorporate all the necessary semantic, syntactic, and phonological features into a set of ideal foreign language teaching materials and present them to students under the most ideal conditions, there is no assurance that they would develop proficiency in the language. Students -- even ideal ones -- simply do not learn a second language in the same way. It is doubtful that they learn their native language in the same way. Foreign language materials, contrived as they are, never take into consideration individual differences among students. What each of us brings to, and extracts from, the language learning situation is a mystery.

In 1961 I was rudely awakened by the realization that it is possible to develop acceptable "speaking" ability and be virtually incompetent in understanding the spoken language. At the academic

year French institute held at Pennsylvania State University in 1960-1961, participants took the uniform pre-institute and post-institute MLA proficiency tests for teachers as prescribed.⁵ A comparison of the average speaking scores of the Penn State participants with those of the All-French Institute participants -- which include all French academic year institutes, French summer institutes abroad, and French summer institutes in the States -- reveals the following:

Table 1

1960-61 MLA Speaking Scores		
	Penn State Average	All-Institute Average
Pre-test	171.0476	178.3738
Post-test	218.3684	181.5057
Improvement	47.3208	3.1301

At that time all tests were graded off campus by MLA specialists at a central point. The Penn State average speaking score shows an improvement of 47+ points, whereas the All-Institute national average -- including the Penn State score -- shows an improvement of only 3+ points. A major feature of the Penn State program stressed step-incremented drills using face-to-face contact and electronic devices.

When the scores involving the other skills are compared with the high score for speaking, the results are disappointing.

Table 2

1960-61 MLA Four Skill Scores

Penn State French Institute Mean		
	<u>Post-test</u>	<u>Pre-test Difference</u>
1. Speaking		+47.3208
2. Listening		+ 2.5039
3. Reading		+ 4.3913
4. Writing		+ 2.0435

The following year, the scores of the 1961-1962 Penn State Academic Year Institute showed comparable results. Thus the assumption that a marked improvement in speaking will result in a concomitant improvement in listening comprehension -- if not in reading and writing -- is not necessarily borne out. It would seem that each skill must be developed separately. Nucleation for speaking does not guarantee nucleation for audio-comprehension. Whether the converse is true still has to be determined by controlled experimentation.

During the summer of 1962, some eighty secondary school teachers of French attended the NDEA Institute held at Besançon. Each participant had already attended a summer institute in the States. Teaching experience in French among the participants ranged from two to as much as eighteen years. Many were surprised to find out that in the streets, or in the shops, they could understand and carry on a conversation with a native speaker only when

they stood face-to-face with him. They were dismayed to discover that they could stand in line in a shop and overhear conversations between two or more native speakers for long periods of time and virtually understand nothing of what was said.

A child learns to use a language only after he understands it. Immigrants may never learn to read or write, but they learn to speak a new language after they learn to understand it. The key to achieving real proficiency in speaking probably lies in achieving real proficiency in listening comprehension. When a native speaker speaks to a non-native, he watches the latter's facial expressions and adjusts his grammar and pronunciation to accommodate the listener. This type of experience does not result in true listening comprehension. Classroom conversations between teacher and students -- and stimulus-response drills in the laboratory -- are seldom designed to "overhear" conversations between two or more native speakers. Real communication in a foreign language is impossible in the absence of audio-comprehension. To put it simply, one must develop an awareness or "state of expectancy" of how the language is pronounced in the mouth of native speakers before he can become an active participant in a conversation. To communicate, one must learn how to listen.

I have described elsewhere how the use of controlled materials based on "live" materials rather than "seeded" texts might enlarge the range of awareness for variations in linguistic form and contribute to the linguistic competence of the learner.⁶ This is

not the place to discuss such details. Suffice it to say that "live" materials can minimize the amount of puzzle-solving in learning to read and understand aurally a foreign language through the use of bilingual texts, sonorama, and analytical procedures that afford the student an opportunity to overhear and understand conversations between native speakers as an "observer." Such procedures help the student who is no longer of pre-school age to develop linguistic competence in a second language, considering that his given faculté de langage has deteriorated somewhat since childhood.

Briefly, then, reading is taught in the classroom -- not assigned as outside homework -- where the student compares an English equivalent with the original text in French. The student reads the English text first, then he tries to decipher the text in terms of each concept. He shifts back and forth from the English to the French until he can understand the French without looking at the English. Each reading session is terminated by a short test in French.⁷

The listening materials represent a self-pacing, self-evaluation teaching and testing device where the student listens in an isolated booth to interviews, newscasts, speeches, popular songs, excerpts from original plays, etc. recorded "live." Students spend as much time as is necessary taking down a portion of a selection in dictation form. After they return to the classroom, pronunciation, morphophonemic patterns, spelling and grammatical mistakes are discussed in detail with the teacher. Once everything

has been thoroughly dissected, each student receives a mimeographed version of the recording. When he returns to the laboratory, the student can check those places where he has experienced interference against his corrected dictation.

Questions in French, live grammar taught by structure cues, pronunciation points, review grammar -- all develop from the reading and listening selections. The teacher is provided with a complete set of possible answers. The "controlled" reading and listening materials seem to contain the necessary primary data with just those semantic, syntactic, and phonological features that are lacking in the "contrived" materials. Only "live" materials will help to develop the degree of linguistic competence that can lead to the degree of linguistic performance characterizing the true creative aspect of language use.

I do not consider such procedures as answers to the questions I posed at the beginning of this paper. I do consider them as a better alternative to "strictly" programmed learning. Carefully planned programmed learning can teach the sound structure, the morphophonemic structure, and the basic syntactic structure of a second language. There is no evidence to support the claim that it can develop real language proficiency.

Quite frankly, I have my doubts whether it is possible to develop foreign language proficiency in an artificial, uncultural situation by any known method. There is a way of finding out, however. Any experimental program should be tried out first on

foreign language majors -- not on beginning language students. If it succeeds with them, then the method can be applied "downward" to non-majors, first with advanced students, then to intermediate students, and finally to elementary students. How far "down" one can go will depend on the extent to which a foreign language program is geared exclusively to the acquisition of language. Real proficiency will not develop within departmental programs dominated by linguistic, literary, educational, or psychological philosophies. There is nothing wrong with preparing foreign language majors for careers in literature, linguistics, or foreign language teaching -- but not at the expense of those students who desire to major primarily -- if not exclusively -- in understanding, speaking, reading, and writing one or more foreign languages.

If there are answers to the questions posed earlier in this paper, they must come from research done on -- and by -- future foreign language majors, who may not necessarily be foreign language teachers. I envisage the creation of a "meaningful" B.A. degree in what might be called Language Proficiency and "meaningful" M.A. and Ph.D. degrees in Language Acquisition. Candidates for the B.A. degree will be concerned with developing near native proficiency in the four skills. They will benefit from research in language acquisition conducted by professors and graduate students devoted primarily to teaching listening, reading, writing, and real speaking in an artificial, unicultural situation. This does not preclude related research in linguistics, literature, psychology,

logic, education, anthropology, etc. But it does mean that the acquisition of foreign language skills takes precedence over any linguistically, esthetically, or educationally oriented considerations.

If a foreign language can be learned in a classroom, it will thrive in an academic atmosphere that favors the kind of program I have been describing. If it is possible to design materials that take into consideration the factor of "individual differences" between students, it may be possible to define the foreign language goal in terms of student achievement rather than in terms of academic year blocks. The acquisition of foreign language skills should take place in the high school, making it unnecessary to extend this function to the university. This will not happen, however, unless foreign language departments at the university level learn "how to let go."

Footnotes

1. Simon Belasco et al., "The Continuum: Listening and Speaking," in Reports of the Working Committees, 1963 Northeast Conference on the Teaching of Foreign Languages, pp. 3-21; see also Simon Belasco, "Structural Drills and the Refinement Principle," International Journal of American Linguistics, Vol. XXIX, No. 2, Part 3 (April 1963), pp. 19-36.
2. Simon Belasco, "Nucleation and the Audio-Lingual Approach," The Modern Language Journal, Vol. XLIX, No. 8 (December 1965), pp. 482-491.
3. Simon Belasco, ed., Manual and Anthology of Applied Linguistics: General Section, French, German, Italian, Russian, Spanish, University Park: Nittany Press, 1960; Applied Linguistics: French, German, Italian, Russian, Spanish, 5 vols., Boston: D.C. Heath, 1961. A revised version of the General and French sections has recently been published: Simon Belasco and Albert Valdman, Applied Linguistics and the Teaching of French, University Park: Nittany Press, 1968.
4. Simon Belasco, "The Plateau; or the Case for Comprehension: The 'Concept' Approach," The Modern Language Journal, Vol. LI, No. 2 (February 1967), pp. 82-88.
5. See S. Belasco, "Nucleation...", pp. 486-488 for a more detailed discussion.
6. Simon Belasco, "Toward the Acquisition of Linguistic Competence: From Contrived to Controlled Materials," The Modern Language

Journal, Vol. LXIII, No. 3 (March 1969), pp. 185-205; see also Simon Belasco, "The Foreign Language Teacher in Search of Values," Proceedings of the 1969 Meeting of the Southern Conference on the Teaching of Foreign Languages (forthcoming).

7. For an experiment incorporating this method, see the Pennsylvania State University dissertation (in progress) by P. Paul Parent, "Beyond the Nucleation Stage: An Investigation of the Effectiveness of Three Methods of Developing Reading Comprehension in a College Course in Intermediate French."